



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/489,561	01/21/2000	William J. Baer	STL000025US1	5987	
23373	7590 10/18/2004		EXAMINER		
	MION, PLLC	NGUYEN BA, HOANG VU A			
SUITE 800	SYLVANIA AVENUE, 1	N.W.	ART UNIT	PAPER NUMBER	
WASHINGT	ON, DC 20037		2122 DATE MAILED: 10/18/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.



				$\mathcal{U}\mathcal{L}$			
		Application No.	Applicant(s)				
Office Action Summary		09/489,561	BAER ET AL.				
		Examiner	Art Unit				
		Hoang-Vu A Nguyen-Ba	2122				
The MAILING DATE of this cor Period for Reply	nmunication app	ears on the cover sheet with the o	correspondence address	\$			
A SHORTENED STATUTORY PERI	OD FOR REPLY	/ IS SET TO EXPIRE 3 MONTH	(S) FROM				
THE MAILING DATE OF THIS COM	MUNICATION.			,			
 Extensions of time may be available under the preafter SIX (6) MONTHS from the mailing date of the lift the period for reply specified above is less than If NO period for reply is specified above, the maxification of Failure to reply within the set or extended period 1 Any reply received by the Office later than three meaned patent term adjustment. See 37 CFR 1.70 	is communication. thirty (30) days, a reply mum statutory period w for reply will, by statute, nonths after the mailing	within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ys will be considered timely. In the mailing date of this commun	ication.			
Status				_)			
1) Responsive to communication	(s) filed on 14 Ju	ıly 2004.		Q			
2a)⊠ This action is FINAL .	• •	action is non-final.					
3)☐ Since this application is in con-	dition for allowar	nce except for formal matters, pro	osecution as to the mer	its is			
closed in accordance with the	practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims							
4)⊠ Claim(s) <u>1-45</u> is/are pending ir	the application.						
4a) Of the above claim(s)	_ is/are withdrav	vn from consideration.					
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-45</u> is/are rejected.	Claim(s) <u>1-45</u> is/are rejected.						
7) Claim(s) is/are objected	l to.						
8) Claim(s) are subject to	restriction and/o	r election requirement.					
Application Papers							
9)☐ The specification is objected to	by the Examine	r.	•				
10)☐ The drawing(s) filed on i	s/are: a)□ acc	epted or b) \square objected to by the	Examiner.				
Applicant may not request that an	y objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
	_	ion is required if the drawing(s) is ob	*	• •			
11) The oath or declaration is object	cted to by the Ex	aminer. Note the attached Office	Action or form PTO-15	52.			
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a an all all bl Some * c) None		priority under 35 U.S.C. § 119(a)-(d) or (f).				
1.☐ Certified copies of the p		s have been received					
		s have been received in Applicat	ion No				
_ ' '	•	rity documents have been receiv	<u> </u>	e			
application from the Inte	•	·					
* See the attached detailed Office		, ,,	ed.				
		· · · · · · · ·					
Attachment(s)		· .					
1) Notice of References Cited (PTO-892)	view (BTO 040)	4) ☐ Interview Summary Paper No(s)/Mail D					
 2)			ate Patent Application (PTO-152)	1			
Paper No(s)/Mail Date <u>4/13/04</u> .	,	6)					

Art Unit: 2122

DETAILED ACTION

- 1. This action is in response to the amendment filed July 14, 2004.
- 2. Claims 1-45 remain pending.

Response to Amendment

- 3. Per applicants' request, claims 1-2, 16-17, 31-32 have been amended.
- 4. PTO Form 1449 filed April 13, 2004 has been initialed and the references listed therein have been considered.

Response to Arguments

5. Applicant's arguments filed July 14, 2004 have been fully considered but they are not persuasive. Following is the Examiner's response to Applicants' arguments.

Claims 1, 16 and 31

Applicants'argument 1:

It appears that the Examiner cites components A, B, C and N as a plurality hierarchically related content entities. However, there is no indication that components A, B, C and N are stored in a hierarchy. In particular, components A, B, C and N appear to be stored in a Knowledge Base. Documents, document components, document type definitions catalogs, rules, lines and other information needed to construct any number of documents and form types are stored in the Knowledge Base. See col. 6, lines 17-28. However, there is no teaching or suggestion that the components are hierarchically related as opposed to being generaly collected in the Knowledge Base.

Examiner's response to argument 1:

In Figure 1, document X, entities B and A are shown being stored

Art Unit: 2122

side by side, entity N is being shown at a level below both entities B and A and one level above entity C. They are thus **hierarchically** related to each other in the document.

Applicants argument 2:

It appears that the Examiner cites documents 44, 46 and 48 as "defining a target location for storing entities of that level." However, claim 1 further recites "defining a target location for storing **inheritance** information for the entities of that level. Poole neither teaches nor suggests that inheritance information is stored in documents 44, 46 and 48. In particular, it is respectfully submitted there is no need to store inheritance information since documents 44, 46 and 48 are independent documents created based on a particular user's needs.

Examiner's response to Applicants' argument 2:

As shown in Figure 1, once the hierarchical information of the instances of entities A, B, C and N has been defined for the document, these entity instances thus receive (i.e., inherit) all the attributes of entities B, A, C and N.

Applicants' argument 3:

Claim 1 further recites "receiving as input the hierarchically related entities and the information specifying their hierarchical relationship." It appears the Examiner cites an entity reference which is associated with constituent portions of a document (see step 34, col. 5, lines 7-9) for teaching the claimed information specifying the hierarchical relationship of the hierarchically related entities. An entity reference is selected by a developer. An entity reference resolution process ensures that all business, legal, and governmental requirements applicable to a particular entity reference are duly satisfied. Col. 5, lines 15-17. However, there is no teaching

Application/Control Number: 09/489,561

Art Unit: 2122

or suggestion in Poole that an entity reference specifies the hierarchical relationship of hierarchically related entities.

Examiner's response to Applicants' argument 3:

As can be seen in Figure 1, entity reference A, e.g., &A is shown to be at the top of the list of entity references whereas entity reference N at the bottom. Step 34 does thus show the inherent hierarchical relationship of the entities.

In light of the above discussion, the Examiner respectfully maintains that the rejection of claims 1-45 under 35 U.S.C. § 102(a) as being anticipated by Poole is proper. The rejection is reproduced hereinafter for Applicants' convenience.

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 7. Claims 1-2, 6-8, 13-15; 16-17, 21-26, 28-30; 31-32, 36-41, 43-45 are rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,006,242 to Poole et al. ("Poole").

Claims 1, 16 and 31

Poole discloses at least:

for each level of the hierarchy, defining a target location for storing entities of that level and a target location for storing inheritance information for entities of that level (see at least Figure 1, items 32, 44, 46, 48 and related discussion in the specification);

receiving as input the hierarchically related entities and the information specifying their hierarchical relationship (see at least Figure 1, item 34 and related discussion in the specification);

for each entity, determining its hierarchical level from the information, and generating inheritance information for that entity (see at least Figure 1, items 36, 38, 40, 42 and related discussion in the specification); and

storing the entity and its inheritance information in their :respective target locations (see at least Figure 1, items 44, 46, 48 and related discussion in the specification).

Claims 2, 17 and 32

The rejections of base claims 1, 16 and 31 are incorporated. Poole further discloses wherein ones of the entities have attributes, each attribute having a value and a first name, further comprising the steps of:

for a hierarchical level, defining a target location for storing attributes associated with each entity of that level, and defining a second name in the target location for each first attribute name (see at least Figure 4, items 119 and related discussion in the specification);

receiving as input the hierarchically related entities and their associated attributes (see at least Figure 4, item 121 and related discussion in the specification);

for each entity having an attribute, mapping the first name of the attribute to the second name of the attribute (see at least Figure 4, items 127, 129 and related discussion in the specification); and

storing the attribute in its target location under its second name (see at least Figure 4, item 131 and related discussion in the specification).

Art Unit: 2122

Claims 11, 26 and 41

The rejections of base claims 1, 16, 31 and intervening claims 2, 17, 32, respectively are incorporated. Poole further discloses wherein the attribute information of an entity is stored in the same target location as the entity itself (see at least Figure 5, item 26 and related discussion in the specification).

Claims 6, 9, 21, 24, 36, 39

The rejection of base claims 1, 16 and 31 is incorporated. Poole further discloses the step of assigning an identifier to each entity (see at least Figure 5, items 26, e.g., entities 1-n; and related discussion in the specification).

Claims 7, 10, 22, 25, 37 and 40

The rejections of base claims 1, 16, 31 and intervening claims 6, 36 are incorporated. Poole further discloses the step of storing the inheritance information of each entity with the identifier of that entity in its target location (see at least Figure 5, item 26 and related discussion in the specification).

Claims 8, 23 and 38

The rejection of base claims 1, 16 and 31 is incorporated. Poole further discloses wherein the inheritance information of an entity is stored in the same target location as the entity itself (see at least Figure 5, item 26 and related discussion in the specification).

Claims 13, 28 and 43

The rejection of base claims 1, 16 and 31 is incorporated. Poole further discloses wherein the data object further comprises an outline defining the order and structure of its

Application/Control Number: 09/489,561

Art Unit: 2122

entities (see at least Figure 5, items 62, 64, 65 and related discussion in the specification).

Claims 15, 30 and 45

The rejections of base claims 1, 16, 31 and intervening claims 13, 28 and 43 are incorporated. Poole further discloses wherein the relationship information further comprises the degree of indentation of an entity in the outline, all entities of a same hierarchical level having a same degree of indentation (see at least Figure 5, items 62, 64, 65 and related discussion in the specification).

Claims 14, 29 and 44

The rejection of base claims 1, 16 and 31 is incorporated. Poole further discloses wherein the relationship information further comprises container labels (see at least Figure 1, items 44, 46, 48, e.g., "Document X", "Document Y," "Document Z").

Allowable Subject Matter

8. Claims 5, 20, 35, 3, 18, 33, 4, 19, 34, 12, 27, 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (703) 305-0103. The examiner can normally be reached on Tuesday-Friday, 6:00 to 16:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

After October 25, 2004, the Examiner can be reached at (571) 272-3701 and the Examiner's supervisor at (571) 272-3695.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2122

October 13, 2004

ANTONY NGUYEN-BA PRIMARY EXAMINER